A CATALOGUE OF THE BIRDS IN THE COLLECTION OF THE BOMBAY NATURAL HISTORY SOCIETY—21 Sturnidae

HUMAYUN ABDULALI [Continued from Vol. 73(3):515]

530 specimens of 42 species and subspecies up to No. 1018 in INDIAN HANDBOOK and registered No. 24315 are covered by this part.

984 **Saroglossa spiloptera** (Vigors) (Himalayan Mountains, restricted to Simla-Almora) Spottedwinged Stare 3:25

29: 16 & & (1 juv.), 11 ♀♀ (1 juv.), 2 o? juv. 6 Bhagat State, N.W. Himalayas, 3 Lohaghat, Almora; 2 Jalai, Guptakashi, î Karuprayag, Garhwal; 4 Dehra Dun; 2 Margherita, 1 Longview T.E., Pankabari, 6 Cachar; 2 Jade Mines, Tawman; 1 Tunkomaw, Prome Dist.; 1 Kungawk, Henzada, Burma.

In both sexes there are some differences in the extent of grey mottling on the head and upperparts, specimens from Dehra Dun and westwards appearing paler than those from Assam and Burma. However, all the pale birds (in worn plumage) are dated between 4 April and 3 July, while the others are 20 Nov. to March, suggesting that the dark birds are all in fresh plumage. Among the males there is considerable variation in the amount of rufous on the underparts.

INDIAN HANDBOOK (5:148) queries the juvenile plumage of the male and female being different. The juvenile \mathcal{S} (No. 6612 Dehra Dun 18 June 1910) in which the bill is not yet fully grown agrees with Marien's (1950, *JBNHS* 49:472 *et seq.*) description, except that the streaking on the throat is very restricted possibly due to the manner of skinning. The plumage is generally like that of the adult male but lacks the dark chin and rich rufous of the

underparts; the upperparts are as in the adult female but grading into rufous on the lower back and rump. The legs and feet are now paler yellow than in the juvenile females *contra* dark in adults of both sexes.

Specimen 17657 (Bhagat State, 25 June) is marked "Juv. 9" by A. E. Jones and is similar to two unsexed birds from Lohaghat, Almora, also marked young. They differ from the adult females in being slightly paler all over and with the spotting on the throat and upperbreast replaced by faint streaking. The upperwing coverts have pale edges.

The extent of rufous and white on the underparts varies in different males and the adult plumage is perhaps attained after more than one moult.

Measurements on p. 381.

Though males average slightly larger, the measurements are not exclusive.

985 **Aplonis panayensis affinis** (Blyth) (Tipperah) Tipperah Glossy Stare 3:24
1 9 Rewa Tea Estate, Lakhimpur, S. Sylhet.
Measurements on p. 381.

986 **Aplonis panayensis tytleri** (Hume) (Andamans) Andaman Glossy Stare 3:23

1 Mannarghat, 1 Wimberleygunj, 1 Maymyo, 1 Long I., 1 South Andamans; 9 Car Nicobar. Measurements on p. 381 under No. 985/6a. 986a Aplonis panayensis albiris Abdulali (Great Nicobar) Great Nicobar Glossy Stare 21: 12 & & (5 imm.) 9 9 9 (6 imm.)

2 Camorta, 10 Nancowry, Central Nicobars; 9

Campbell Bay, Great Nicobar.

In both 986 and 986a, the females in series show less gloss on the underparts. Some of them (3 23205 Andamans, 22415 Nancowry, 22403 and 9 22422 Great Nicobar) have the chin and upper breast almost completely dark.

Measurements on p. 381 under No. 985/6a.

987 **Sturnus malabaricus malabaricus** (Gmelin) (Malabar Coast, as migrant) Greyheaded Myna **3:**39

27: 12 8 8 9 9 9 9 6 o?

1 Kihim, Kolaba, Maharashtra; 1 Maraiyur, Travancore; 1 Robinson's Park, Madras; 1 Cumbum Valley, 2 Godavary Delta, 1 Sankrametta, Vizagapatam; 1 Barkul, Chilka Lake, 1 Bumt (?), Balasore, Orissa; 1 Rajputtee, Saran, Bihar; 2 Gorakhpur, 1 Ganai, Almora, 3 Naini Tal; 2 Bankulwa Morang, Nepal; 1 Naunati, 24-Parganas, Bengal; 1 Bagho-Bahar, 2 Dibrugarh, 2 Tezu, Lohit Valley, Upper Assam; 1 Lanang, N. Cachar, 1 Dinapur Road, Manipur; 1 Akyab, Burma.

Measurements on p. 381.

988 **Sturnus malabaricus blythii** (Jerdon) (Malabar) Whiteheaded Myna **3:**40

26: 15 δδ 10 ♀♀ (3 juv.) 1 o?

1 Ajwa, Baroda, 1 Bulsar; 1 Tulsi, Bombay, 1 Shil, Thana, 4* Ratnagiri; 2 Karwar, 1 Alanki, 1 Santgal, 1 Gundbala, 1 Gotegali, 2 N. Kanara; 1 Telguppa, 1 Lingadelly, Sagar, 1 Jagan Valley, Kadur, 2 Gudalur, Nilgiris, 1 Wynaad, 2 Thekadi, 1 Tenmalai, 1 Kotathrupali, Travancore. (*1 & missing).

Measurements on p. 381 under 9871.

989 **Sturnus malabaricus nemoricola** (Jerdon) (Thayetmyo, Upper Burma) Whitewinged Myna **3:**42

13: 3 & & 2 \quad \text{\$\$\text{\$\exitit{\$\text{\$\text{\$\exititt{\$\text{\$\exititit{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\e

¹ Some notes on this and other subspecies are incorporated in a separate contribution (in press).

2 Kaming, Upper Burma, 1 Tounggyi, S. Shan States, 1 near Mindon Chaung, Thayetmyo district, 1 Kyethe, 1 Pakkaing, 1 Prome, Prome district, 4 Pegu, 2 Ataran, Burma.

Measurements on p. 381 under 987.

990 **Sturnus erythropygius andamanensis** (Tytler) (Andamans) Andaman Whiteheaded Myna **3:**41

4: 2 8 8 2 9 9

1 Long Island, 1 Bakultala, Middle Andamans; 1 Wrightmyo, 1 Chirria Tapoo, S. Andamans.

These specimens have been measured and commented upon in my Nicobar paper (*JBNHS* 64, pp. 179-180).

991 **Sturnus erythropygius erythropygius** (Blyth) (Car Nicobar) Nicobar Whiteheaded Myna **3:41**

5: 3 δ δ 2 P P All Car Nicobar Measurements as under 990.

992 Sturnus erythropygius katchalensis (Richmond) (Katchal, Nicobars) Katchal Whiteheaded Myna 3:42

nil.

993 **Sturnus senex** (Bonaparte) (Ceylon) Ceylon Whiteheaded Myna **3:**46 nil.

994 **Sturnus pagodarum** (Gmelin) (Malabar) Blackheaded or Brahminy Myna **3:**47 36: 20 \$\$ \$(2 imm.) 14 \$\varphi\$\$ \$\varphi\$\$ (1 imm.) 2 o? (imm.)

5 Chitral, N.W.F.P.; 1 Shikohpur, Jullunder; 3 Bhagat State; 1 Kishtwar, Kashmir; 3 Delhi, 4 Bharatpur; 1 Pali, Jodhpur; 1 Kharirohar, 1 Kuarbet, Kutch; 1 Gir, 1 Nadiad, 1 Dediapada, Rajpipla; 1 Santa Cruz, Bombay, 1 Kihim, Kolaba, 1 Panchgani, 1 Satara, 1 Ratnagiri; 1 N. Kanara; 1 Cassimode, Kerala; 1 Palkonda Hills, 1 Seshachalam Hills; 1 Bulandshar, 1 Bareilli, 1 Kumaon & Naini Tal dist., U.P.; 1 Mowli?

There is considerable variation in the grey of the upperparts and the rufous below; the birds from Chitral Drosh going back to April/May, 1902/3 are the palest above and may be of the pale form *afghanorum* described by

Koelz. But though in addition, the northern birds measure slightly larger than the southern, the seasonal movements of the species are not yet understood and the material available does not permit any definite opinion.

Measurements on p. 382.

995 **Sturnus sturninus** (Pallas) (Dauria) Dauria Myna **3:**43

1 o? Pegu, Burma (C. W. Allan) Wing 110; bill 15.3; tail 52.

996 **Sturnus roseus** (Linnaeus) (Lapland, Switzerland) Rosy Starling **3:29**

55: 36 & & (5 juv.) 16 \quad \Quad \quad (4 juv.) 3 o? (1 juv.)

1 Felujah, Iraq; 1 Kasvin, Persia; 2 Kornah (Pelar), 180 m. sw of Kalat, 8 Mastang, 1 Ziarat, Baluchistan; 2 Peshawar, N.W.F.P.; 1 Multan, 1 Pipli, Karnal, Punjab; 3 Delhi, 1 Bharatpur, 1 Bhujia, 1 Kharirohar, 1 Kuarbet, 1 Chotari, Kutch; 1 Radhanpur, 1 Bhavnagar, 1 Nadiad, 1 Vagjipur, 1 Ajwa; 1 Borivli, 3 Santa Cruz, 2 Bandra, 1 Byculla, 1 Bombay, 1 Kaneri I.; 1 Satara; 1 Saugor, M.P.; 1 Karwar; 1 Pt. Calimere, T.N.; 1 Chilka, 1 Attegarh, 1 Tigeria, 2 Khanar, Pal Lohara, Orissa; 2 Baghowni, 1 Jamiya, Darbhanga, Bihar; 1 Kallianpur, Kanpur, U.P.; 3 no data.

The typical pink on the upper back and rump is only visible in specimens taken in June/July/August and then reappears in March/April, those taken in the intermediate period having their backs sullied by the brown tips to the feathers which look very much as if due to staining. According to BRITISH HAND-BOOK, 1945, (1, p. 47) this is due to the tips being worn off.

In addition to the difference in size (q.v.), the females are duller in colour, and most of them show all-brown feathers on the back, rather than pink with brown tips which hide the pink in the male.

Measurements on p. 382.

EL **Sturnus vulgaris vulgaris** Linnaeus (Sweden) European Starling

22: details below:

(a) 1 o? Isle of Wight, U.K.

(b) 21: 9 & & 9 \quad \text{\$\text{\$9}} \quad 3 \quad o?

1 Dohuk, 3 Bait-u-Khalifa, 1 Samara, 3 Baghdad, 1 The Narrows, 16 m. n.e. of Kut, 2 Magasin, 6 m. e. of Kut, 2 Sheikh Saad, 1 Felujah, 1 Sulaimaniya, 1 Amara, Iraq; 1 Shustar, 2 Katunak, 8 m. and 2 Pir-e-Banu, 9 m. s. of Shiraz, Iran.

All obtained between 12 November and 11 March.

It must be mentioned at the outset that though the differences among the starlings have been discussed at length, and many subspecies have been described in the Palaearctic, it is impossible to identify all the specimens in widely differing plumages, some of which do not exhibit the characters on which they have been described. The material from Iraq and Iran has been particularly difficult, for in several instances the specimens are marked with one name and referred to in literature by another. Several under (b) above were marked sophiae by Ticehurst, who later cut this out and inserted "vulgaris" and in his subsequent reports (JBNHS 26: 382 and 28: 275) does not think them separable. The original description of sophiae refers to a purple head and a green eye patch. Of the 35 skins of 4 subspecies examined by Ticehurst, 25 are now available. All mentioned under (b) have purplish heads contra greenish in the single specimen under (a), and may well be included with poltaratskyi below.

The spotting in several is also much more prominent and displays a more whitish bird than in any other race, or exhibited in any of the coloured illustrations available of the nominate race. The identifying characters (or the differences) are mentioned in brief but it is not possible to be very certain of some of the identifications.

Measurements on p. 384.

EL Sturnus vulgaris caucasicus Lorenz (Northern Caucasus) Caucasian Starling 4: 1 & (juv.) 2 PP 1 o? (juv.)

1 Amara, Iraq; 1 Meshed, N. Persia; 1 Kangwai, Iran; 1 Mishun, Persian Gulf.

Adult female 6669 (Meshed, 23 February) has the head and ear-coverts greenish and the rest of the upperparts similar to those of nobilior. This appears to be a resident form in Iran and the two juveniles are included herein. The other 9 No. 6682 from Amara, Iraq, was collected by R.E. Cheesman on 4 February, 1918 and though marked *caucasicus* by Ticehurst, the head is purple and only the ear-coverts slightly green (?). In the absence of any alternative, it is left here.

No. 6683 from Kangwai is the all-brown fledgling with a white chin and more white in the centre of the lower belly, as illustrated in European ornithological literature. The other is older and dark sooty all over spotted (except head and throat) buff above and white below, with the spots on the lower breast and belly being larger. The primary coverts are edged with rufous.

Measurements on p. 384.

Sturnus vulgaris poltaratskyi Finsch (Marka-Kul, Eastern Kazakhstan) Common Indian Starling 3:34

40: 16 & & (1 juv.) 20 \$\$\text{Q}\$\$ (1 juv.) 4 o?

1 Mishin, Persian Gulf; 1 Wana, Waziristan; 1 Peshawar; 2 Kesun 4500', Chitral; 1 Campbellpur, 2 Rawalpindi, 1 Mianwali, 2 Jhelum, 1 Madhopur, 2 Shikohpur, Jullunder, 1 Chandigar, 2 Darazpur, 2 Ambala, 1 Dankuri, Karnal, 1 Mubarakpur, 1 Bahawalpur; 1 Bhagat State, Simla; 2 Delhi; 1 Shah Hasan, Manchar, Sind; 3 Santanwara, 1 Gwalior; 2 Sait, Kaira, 2 Rewana Tank, Jasdan; 4 Rewas, Kolaba, Maharashtra; 1 Tirhut, 1 Baghowni, Bihar.

The amount of purple following that of the head along the back varies to an appreciable extent; birds with spotted heads. November to January, appear to show less purple and more green.

Two from Jhelum (20 March 1897) have

dusky heads with no gloss and appear juveniles and their 125 and 127 mm wings appear too large to belong to indicus.

Measurements on p. 384.

998 Sturnus vulgaris nobilior Hume (Kandahar) Afghan Starling 3:34

7: 288 3 99 2 o?

2 Sheikh Saad, Iraq; 1 Sitarbo, 21 m. s.e. of Khwash, Persian Baluchistan; 1 Wano, Waziristan; 1 Chaman, Baluchistan; 1 Mianwali, Punjab; 1 Parjah, Bettial, Champaran, Bihar (?)

As in poltaratskyi, there is a purple head fellowed by green but both colours are brighter and the wing-coverts purple and not green. The spots on the upperparts are also white contra buff, smaller and less abundant and the under wing-coverts are darker with narrow white edges to each feather.

Hume described this with great enthusiasm but subsequent workers do not appear to have agreed. The male and female from Sheikh Saad have large 135 mm wings and of which the former (No. 6679) was named caucasicus by Ticehurst (loc. cit) though the label reads nobilior. All the other five of both sexes have their wings under 130 (125-129). Unsexed Sp. No. 6692 from Chaman, Baluchistan, is in the spotted phase but it has a purple head, green back spotted with white (?) and a little purple on the wing-coverts.

Sp. No. 6713 is marked as Parjah, Bettial and said to have been collected by F.J.R. Field on 16-2-1892. A Mr. Frank Field is included in the list of members of the Society for 1892, from Behar. If the place name is read as Bettiah in Bihar, and the identification is correct, this is a considerable extension of its presently accepted range.

Measurements on p. 384.

999 Sturnus vulgaris porphyronotus Sharpe (Yarkand) Central Asian Sarling 3:32

10: 5 \$ \$ 3 \quad \quad \quad 2 \quad \quad \quad ?

2 Kiba Drosh, 2 Jinjoret, Chitral; 1 Campbellpur, 1 Jagadhri, 1 Madhopur, 2 Ambala; 1 Baghowni, Bihar.

These are distinguished by the greenish head followed by the all purple upperparts, including upper wing-coverts. The Baghowni specimen if correctly named extends the recorded distribution of the subspecies.

Measurements on p. 384.

1000 **Sturnus vulgaris minor** Hume (Larkana, Sind) Sind Starling **3:33**

1 Dalipata, Hyderabad, 1 Audalbad, Sukkur,

Both (3rd March and 12th April) are in dark plumage and have yellow bills. The same remarks apply to all dated specimens (8) under 1001 *indicus* below, and which were obtained between 3rd March and 17th May. Ticehurst (*Ibis* 1922, p. 622) states that the winter spotting and the juvenile plumage are much the same as in the typical race.

Measurements on p. 384.

1001 **Sturnus vulgaris indicus** Blyth (Nepal) Kashmir Starling 3:31

10: 5 8 8 3 9 9 2 o?

2 Kupwara Road, 2 Srinagar, 2 Kashmir Valley, 4 Kashmir.

See remarks under 1000 above. No. 20607 (17th May) is sooty all over, with almost no gloss, presumably juvenile.

All the specimens have a greenish tinge on the ear-coverts.

Measurements on p. 384.

1002 **Sturnus contra contra** Linnaeus (Chandernagore, Hooghly District, W. Bengal) Indian Pied Myna **3:**63

25: 16 & & 8 PP 1 o? imm.

2 Jagadhri, Ambala; 3 Bharatpur, Rajasthan; 1 Trombay, 1 Malad, Bombay; 3 Saugor, 1 Jubbulpore, 3 Geedam, Bastar, M.P.; 1 Nelipaka, Hyderabad, 1 Parvatipur, Vizagapatam; 1 Nilgiri, 2 Barkul, Chilka Lake, Orissa; 1 Baghowni, 1 Manjhaul, Bihar; 2 Meerut, 1 Manhofe, Terai, 1 Nawepur, Nepal.

The upperparts of the females are browner than in the males.

The immature bird has a brown head contrasting with the already black feathers of the back and wings.

Measurements on p. 382.

1003 **Sturnus contra sordidus** Ripley (Sadiya, Northeastern Assam, Lohit Division, NEFA) Eastern Pied Myna

7: 2 \$ \$ 2 \quad \

1 Sadiya, 1 Tez, Lohit Valley; 2 Dibrugarh, Assam; 3 *Upper Burma*.

The two males from Sadiya and Lohit Valley are distinctly greyer below and have sepiacoloured (not whitish) streaks on the shoulders. Nominate *contra* do not show streaks on the nape as stated in the key in IND. HANDBOOK.

The female from Dibrugarh is not so distinctly different as the male and the three unsexed birds from Upper Burma though not separable from nominate *contra* are left here (?).

The juvenile has a brown head slightly darker than the back.

Measurements on p. 382.

1004 **Sturnus contra superciliaris** (Blyth) (Rangoon) **3:**64

2 9 9

1 Hkamti, Myitkyina District, Upper Burma; 1 Henzada, Burma.

In both birds the back is very brown contra black head.

Measurements on p. 382.

1005 **Sturnus sinensis** (Gmelin) (China) Chinese or Greybacked Myna **3:37** nil.

1006 Acridotheres tristis tristis (Linnaeus) (Pondicherry) Indian Myna 3:53 51: 21 8 8 26 9 9 (1 juv. 2 albinoid) 4 o? (1 juv.)

1 Ornach, Baluchistan; 1 Miranshah, N. Waziristan; 1 Chitral Drosh, 1 Pandach Valley, 1 Srinagar, 1 Kashmir Valley, 1 Lalroo, 2 Ambala; 6 Simla;

2 Bharatpur; 2 Kharirohar, Kutch; 1 Amreli, Gir, 1 Bodeli, Baroda; 1 Bhiwandi, 1 Mumbra, Thana, 1 Mulund, 1 Andheri, 1 Bandra, Bombay; 1 Konkan; 1 Karwar; 1 Cassimode, 1 Aramboli, 1 Trivandrum Beach; 1 Bhadrapur, 1 Talguppa, 3 Anandpurna, Sagar, Mysore; 1 Chitteri Range; 1 Nallamalai Range; 1 Rajputtee, Saran, 1 Bhagowni, 1 Manjhaul, 1 Bairia, Patharghatta, Bihar; 1 Chamoli, Gharwal, 1 Rampur, 2 Kurseong; 1 Dibrugarh, 1 Goalpara, 2 Sadiya, Assam; 1 Wrightmyo, Andamans.

There is appreciable variation in the depth of the brown both above and below, and in the measurements, including the length and thickness of the bill, but it is not possible to localise any of these differences. The darkest birds from Kerala can be matched with specimens from Simla, but all the several specimens with paler underparts appear to be from the north and northwest, i.e. 1 Chitral, 2 Kharirohar, Kutch, 1 Bodeli, Baroda, 2 Bombay area. A 3 No. 6834 from Aramboli, S. Travancore has the black of the neck and breast extending towards the abdomen in the centre grading towards melanosternus of Ceylon, as suggested by Vaurie (1959).

I recently (Oct. 1975) assisted Dr. A. J. Baker from Royal Ontario Museum in collecting a series of 20 males and 16 females around Bombay and the measurements of these birds are mentioned separately. The single \$\gamma\$ from Wrightmyo, Andamans, where it was introduced in the 1850s, is the smallest. Though no separate subspecies is now accepted from Burma, it may be worth recalling that in *Ibis* 1868, p. 220 Blyth is quoted as referring to specimens from Port Blair, Andamans, being smaller and darker than those from Bengal and resembling those from Burma. The birds are said to have been introduced in the Andamans by Col. Tytler.

The collection includes two almost pure white specimens from Ambala, Punjab and Rajputtee, Saran, Bihar. No. 17697 from Simla

is pale brown all over with the head slightly darker, but not black. No. 6826 from Miranshah, N. Waziristan is pale fawnish all over, with the head slightly darker, and whiter wings and tail. No. 17699 juv. \(\text{\$\text{2}}\). Simla is dull brown with wings and tail largely white; the white stripes over the eyes meet at the nape, which is black as also the cheeks, creating a very distinctive effect.

After completion of these notes I saw R. K. Brooke's MORPHOLOGICAL NOTES ON Acridotheres tristis IN NATAL [Bull. B.O.C. 1976: 96 (1), pp. 8-13] in which he revives Hodgson's Maina tristoides (1836) holding that birds from peninsular India are paler and duller below and less reddish on the back than birds from Burma and Nepal. The differences are expressed in Ridgway's (1912) colours. We have no material from Nepal or Burma, but the variations in colour visible in the specimens available do not appear to support any definite colour change in that direction.

Measurements on p. 382.

1007 Acridotheres tristis melanosternus Legge (Pasdun Korale, Ceylon) Ceylon Myna 3:55

1 9 Pasvala, W.P., Ceylon.

Measurements on p. 382.

1008 Acridotheres ginginianus (Latham) (Gingee) Bank Myna 3:55

9: 4 & & (2 juv.) 499 1o?

1 Shikohpur, Jullunder, 1 Jagadhri, Ambala; 1 Delhi; 1 Kutch, 1 Ajwa, Baroda; 1 Ghoti, Nasik; 1 Saugar, M.P.; 1 Baghowni, Tirhut, Bihar; 1 Bulandshar, U.P.

There is some variation in the tone of grey on the upperparts but the number available is insufficient to warrant any remarks. The juvenile male from Baghowni, Bihar (24 Novvember) has its head a paler brown than in the other from Ajwa, (2 November Baroda) and which is generally browner on the back and wings. Both have whitish chins which immediately separate them from the adults.

Measurements on p. 383.

1009 Acridotheres fuscus fuscus (Wagler) (Sikkim) Northern Jungle Myna 3:57

13: 6 8 8 7 9 9.

1 Rawalpindi, Punjab; 2 Solon, Simla Hills; 2 Supkar, Balaghat, M.P.; 1 Tigeria, 1 Beriberi, Puri, Orissa; 2 Baghowni, 1 Madhubani, Bihar; 1 Mussoorie, U.P.; 2 Calcutta Market.

All three races have been arranged largely on the basis of the distribution in INDIAN HAND-BOOK, but none of them appear to be very easily separable. Except for two from Tigeria, Orissa and Mussoorie, all the above have paler underparts which are more distinctive than any other character.

Measurements on p. 383.

1010 Acridotheres fuscus mahrattensis (Sykes) [the Ghats (near Poona)] Southern Jungle Myna 3:57

15: details below.

(a) 6: 43 3 2 9 9

1 Raita, Kalyan; 1 Kihim, Alibag, Kolaba; 4 Ratnagiri.

(b) 9: 688 30?

1 Karwar, N. Kanara; 2 Hirebhaskar, 1 Lingadhally, Sagar, Mysore; 4 Shembaganur, Palnis; 1 Travancore.

Birds in group (a) are slightly paler, both above and below, than those from North Kanara and southwards, some of the latter being barely separable from fumidus, except for the browner upperparts of the former.

Measurements on p. 383.

1011 Acridotheres fuscus fumidus Ripley (Sadiya, N.E. Assam) Eastern Jungle Myna

9: details below.

(a) 3 \$ \$ 4 \text{ } \text{ } \text{ } (2 \text{ iuv.})

1 Goalpara, 1 Sadiya, 1 Tezu, Lohit Valley; 2 Margherita, Dibrugarh, 1 Assam, 1 Upper Burma.

(b) 1 ↑ 1 ♀

1 Prome, 1 Ataran, Amherst, Burma.

Wing ♂ 122, ♀ 121

The specimens date back to 1913 and 1929 but compared with older specimens under (a), show more brown tending towards *mahrattensis*.

Measurements on p. 383.

1012 Acridotheres javanicus infuscatus (Baker) (Lower Chindwin, Burma) Orangebilled Jungle Myna 3:59

3: 1 & 2 o?

1 Myitkyina, 1 N. Shan State, 1 Yawmyo, Pak-koku, Magye district, Burma.

These were listed under A. fuscus, but lack the dark patch (blue in life?) at the base of the bill, are darker both above and below and also larger than the nearest race of fuscus i.e. fumidus (No. 1011 above).

Measurements on p. 383.

1013 Acridotheres albocinctus: Godwin-Austen & Walden. (Manipur Valley). Collared Myna 3:60

3: 288 1 o?

1 Moirang, Manipur; 1 Kamaing, Myitkyina, 1 Maymyo, Burma.

The smaller male (also the unsexed bird) is browner above and duller below than the larger.

Measurements on p. 383.

1014 **Mino coronatus** (Blyth) (Tenasserim) Goldcrested Myna 3:44 nil.

EL Sturnus cineraceus Temminck (Japan) Grey Starling

1 o? Kamaing, Myitkyina, Burma (H. H. Harrington 10 Feb. 1901).

Wing 131 (122-132), bill — (23-25); tail 64 (61-65).

EL Sturnus burmannicus burmannicus (Jerdon) (Thayetmyo, Upper Burma) Vinousbreasted Starling 3:50

7: 2 å å 3 \ \ 2 o? (1 juv.)

2 Shwebo, 1 Pakokku, 2 Prome, 2 o?

Unsexed Sp. No. 23977 with no data, has the white head and throat of the adult replaced by a rufous which suggests a stain but is said to be the plumage of the juvenile. Its bill however is noticeably longer than in the others —23.5 mm *cf.* 19.5-21.8 av. 21.

The two without data, viz. one with the longer bill, and the other collected by J.P. Cook, both have their underparts slightly dark-ker than in the others.

EL Sturnus nigricollis (Paykull) (Canton, China) Blacknecked Myna 3:49

4: 1 å * 2 ♀ ♀ 1 o? (juv.)

1 Shwebo, 2 Maymyo; 1 Nangpens, N. Shan States.

Wing 153, 157 *158 (150-159); bill 27.5, 28.6, 29.5* (29-30); tail 83, 89, *92 (87-91).

1015 **Gracula religiosa intermedia** A. Hay (Cachar) Northern Hill Myna **3:**19

9: 3 & & (1 juv.) 4 \quad \quad \quad 2 o?

2 Bankulwa, Morang, Nepal; 1 Berrik, 600', Sikkim; 1' Margherita, Assam; 1 Wuntbo district, 1 Thayetmyo, 1 Ataran, 1 (?) Burma; 20 m west of Meetaw, 1 Siam.

See remarks under 1017. Measurements on p. 384.

1016 **Gracula religiosa indica** (Cuvier) (S. India) Southern Hill Myna **3:**17

17: 8 \$ \$ 6 \$ \$ 9 3 o?

1 Kumta, 2 Patoli, 2 N. Kanara; 1 Gamorthaghatta, 1 Lingadhally, Sagar, Shimoga district, Karnataka; 1 Kallar, 2500', 1 Honametti, 1 Gudalur, 5000', 2 Wynaad, Nilgiris; 3 Shambaganur, Palnis, 1 Thekaddy, 1 Balamore, Ashambu Hills, Travancore.

Measurements on p. 384.

1017 **Gracula religiosa peninsularis** Whistler & Kinnear (Sambalpur, Orissa) Eastern Hill Myna

4: 1 8 3 9 9

1 Bastar; 1 Gomia, 1 Kutri, Daspalla, Orissa; 1 Bihar.

Some time back, at the instance of Dr. Ripley I had a look at these specimens and was unable to separate them from *intermedia* (No. 1015) above. As will be seen from the measurements on page 384 they are not separable

by size and do not differ in having a "finer" bill. The 4 specimens could be picked out by their "higher" and apparently shorter bills, but this impression is not substantiated by the measurements as taken.

1018 **Gracula religiosa andamanensis** (Beavan) (Andaman) Andaman Hill Myna **3:**20

1: 488 3 99

2 Betapur, M. Andamans; 1 Wrightmyo, 1 Chauldhari, 1 Port Blair; 2 Narcondam Island.

Measurements on p. 384.

See remarks (1976) *JBNHS 71*: 502 re. Narcondam specimens.

1018a **Gracula religiosa halibrecta** Oberholser (Little Nicobar Island) Nicobar Hill Myna

7: details below.

(a) 4: 28 8 29 9 Great Nicobar

(b) 3: 18 299 Central Nicobars.

1 Camorta, 1 Dening, 1 Nancowry.

In 1967 (JBNHS 64: 180-1) I accepted this race for its larger size and the lappets on the back of the head "being joined and bearing no feathered portion in between". This could perhaps be better expressed by saying that the joint of the lappets is some distance away from, and free of the feathered portion of the head contra flush with, and sometimes hidden by the feathers.

Specimens in Group (b) from Central Nicobars do not show this character and are larger than birds from the Andamans, approaching the two from Narcondam Island (see under 1018). Stuart Baker in FAUNA (3:20) refers to two specimens from South Andamans, in the British Museum, having very strong, coarse bills and being much nearer to G. r. javana. Without any material from Java and considering the curious fact that the species has not been recorded from Car Nicobar, no further remarks are possible.

Measurements on p. 384.

984 Saroglossa spiloptera

	Wing	Bill	Tail
Western 33	109-114 av. 110	17·5-20.1 av. 19·3	55-60 av. 57.8
Eastern 33	107-113 av. 109-5	17.9-19.3 av. 16.3	55-62 av. 58.5
(IH ex Marien	110-115	fi	56-61)
Western ♀♀	101-112 av. 105-4	18.2-20·4 av, 19·3	54-61 av. 56
Eastern 9 9	103-108 av. 105⋅6	18.2-19·2 av. 18·6	50-62 av. 56-6
	(1H ex Marien 105-106	5	54-58)

985/6a Aplonis panayensis affinis, A. p. tytleri, A. p. albiris

	Wing		Bill	Tail
		from feathers	from nostril	
A.p. tytleri 33	118-120 av. 118-4	19-21-4 av. 19-9	14·4-15·6 av. 14.9	70-78 av. 74. 2
A.p. tytleri & d (imm.)	109,117,117	17,18.7,19	13.4,14,14.7	67,71,71
A.p. albiris 33	115-121 av. 119	17·5-20·5 av. 18·8	13.5-15.6 av 14.1	71-76 av. 73·3
A.p. albiris & & (imm.)	109-121 av. 114	18- 6-1 9-7 av. 19	13.5-15.2 av 14.5	67-69 av. 67.4
A.p. affinis 1 Q	110	17.2	13.2	70
(IH <i>e</i> :	x Ticehurst	-	-	-)
A.p. tytleri 99	111-116 av. 113	18·19 av. 18·7	13·5-15·2 av. 14·3	67-70 av. 69
A.p. albiris 9	112,115,116	18,18.2,19.3	14,14.2,15	67,71,71
A.p. albiris $Q Q$ (imm.)	103-108 av. 106	17·6-19·3 av. 18·1	13·5-15·2 av. 14·3	63-68 av. 64-5
	(♂♀ 112-120		-	-)

987/9 Sturnus malabaricus malabaricus, S. m. blythii and S. m. nemoricola

	Wing	Bill	Tail
ਰੋ ਰੋ			
nominate northern (6)	100-102 av. 101*	17·5-18·7 av. 18	61-64 av. 62·5
,, southern (5)	101-103 av. 102	18·2–19·7 av. 18·5	61-65 av. 61-4
	(1н 98-106	from skull 21-24	59-65)
blythii (12)	102-106 av. 104	19-21.8 av. 20.2	60-67 av. 63-5
	(ін 96-107	from skull 23-24	62-67)
nemoricola (7)	98-103 av. 101.5	16-20	59-66 av. 62
	(94-103		-)
φ φ			
nominate northern (4)	97·104* av. 100	17, 19⋅5 av. 18⋅8	56,57,60,65*
,, southern	96,97,99	17,18,18.5	55,60,60
	(ін 94-104	from skull 20-22	55-65)
blythii	100-104 av. 102·5	18·4-20 av. 19·3	60-64 av. 61 4
	(ін 97-104	from skull 22-25	59-65)
nemoricola (5)	95-99 av.96·3	16-17.2	57-61 av. 59·5
	(1Н ♂♀ 94-103	_	-)

^{*}The large male No. 6751 from Dibrugarh, referred to in the text is not included but females include No. 6771 from Tezu with the largest wing* and tail.*

JOURNAL, BOMBAY NATURAL HIST. SOCIETY, Vol. 75

994 Sturnus pagodarum (Gmelin)

		Wing	Bill	Bill from nostril	Tail
Northern &&	(11)	104-112 av. 109.8	17-20-2 (18-1)	13·5-15.3 av. 14·2	65-71 av. 67·3
Southern 33	(5)	102-104 av. 103.4	16.9-19-5 (18)	14·2-15.7 av. 14·7	62-66 av. 63-4
		(ін 99-112	from skull 20-24		60-75)
Northern 9 9	(7)	101-108 av. 106	18-20 (18-6)	13·5-15 av. 14.3	61-69 av. 65
Southern 9 9	(6)	100-105 av. 102 6	16.6-17.5 (17-1)	12·1-15·1 av. 13.6	59-65 av. 63
		(ін 99-109	from skull 20-21	-	58-68)

996 Sturnus roseus (Linnaeus)

Wing	Bill	Tail
♂ ♂ 127-138 av. 132·4	20-22.6 av. 20-7	62-76 av. 69·7
(ін 125-136	from skull 24-26	67-73)
♀ ♀ 123-131 av. 126	19·3-23·5 av. 21·5	61-68 av. 64.7
(1н 122-126	from skull 22-24	65-72)

1002-4 Sturnus contra subspp.

ਰੋ ਰੋ	Wing	Bill	Tarsus	Tail
S. c. contra	117-125 av. 121	28.4-30-5 av 29-3	30-32 av. 31·3	64-72 av. 67-4
	(ін 118-126	from skull 30-35	32-35	63-75)
S. c. sordidus	118, 121	31 (2)	29,32	67
	(ін 116, 124	from skull 33, 35		-)
φ φ				
S. c. contra	110-123 av. 118.6	27·3-30 av. 28.8	28-34 av. 31	62-72 av. 66
(1	н 114-120	from skull 31-33	32-34	64-72)
S. c. sordidus	120	31.5	32	65
S. c. superciliar	ris 114 (2)	29.2, 30.6	28,30	62,67

1006-7 Acridotheres tristis subspp.

			* *	
ਰੋ ਰੋ	Wing	Bill	Tarsus	Tail
A. t. tristis	139-153 av. 146⋅5	20·3-22·7 av. 21.4	34-43 av. 38-5	81-91 av. 87·3
Bombay (AJB)	138-147 av. 144-5	20·2-24·3 av. 22·1	_	83-96 av. 87.5
(ін 1	38-153	from skull 25-30	34-42	79-86)
φ φ	133-150 av. 141-5	20- 2 4-4 av. 22-4	35-41 av. 38	72-96 av.82.3)
1 Andaman	130	21	36	72
Bombay (AJB)	134-144 av. 139	19·4-23·9 av. 21.4	-	73-90 av. 85
	(ін 138-147	from skull 25-28	35-41	79-86)
Dr. Baker weig	ghed his specimens	♂♂ 112-150 gm av. 132-5gm	♀ ♀ 99-141gm av.120) gm
melanosternus	133	18.7	32	72

BIRDS IN BOMBAY NATURAL HISTORY SOCIETY COLLECTION—21

1008 Acridotheres ginginianus

Wing	Bill	Tarsus	T ail
· · · · · · · · · · · · · · · · · · ·	19.5 (2)	-	62, 64
(ін 118-129	from skull 24-25		65-74)
φ φ 120-124	19.5-21.3	-	65-73
(ін 114-123	from skull 24		60-71)

1009-11 Acridotheres fuscus subspp.

					FF.	
		ゔ゚ゔ゚	Wing	Bill	Tarsus	Tail
A	f.	fuscus	120-131 av. 125.6	19.5-22.5	30·35 av. 32·7	70-73 av. 71
			(ін 122-130	from skull 26-28	-	72-76)
A	f.	mahrattensis (a)	120-129 av. 125	20-20-2 av. 20-1	30-32 av. 31.5	69-75 av. 73·2
A	f.	mahrattensis (b)	122-132 av. 126-8	20-21-2 av. 20-5	30-32 av. 31.5	69-82 av. 74.3
			(ін 126-134	from skull 26-28	c. 36	73-79)
A	. f.	fumidus	(a) 118, 123 (2)	21.3, 21.6	32, 34, 35	72, 74, 75
			(н 4♂♂ 120-128	-		-)
			(b) 122	21.7	32	63 (worn)
		φ φ				
A	f.	fuscus	115-126 av. 120	19·5-21·2 av. 20·5	31-35 av, 32·7	67-73 av. 70
			(ін 120-125	from skull 25-27	-	67-75)
A	. f.	mahrattensis (a)	121, 130	19.5, 20	32 (2)	72, -
			(ін 121-131	from skull 25-27	c. 36	70-78)
A	. f.	fumidus	(a) 124, 127	21.7,22.6	34 (2)	71, 75
			(b) 121	21	33	69

1012 Acridotheres javanicus infuscatus

1 ♂ 20?	137, 139, 144	21.4, 23, 23.6	36, 36.4, 37.4	73, 81,81
	(ін 120-130	22-23	37-43	77-88)

1013 Acridotheres albocinctus

2 ♂♂ 10?	135, 135, 131*	22.7, 23.5, 24*	33.5, 36.5, 34.3	72, 83,73*
----------	----------------	-----------------	------------------	------------

1015-18a Gracula religiosa subspp.

<i>ਹ</i> ਾ <i>ਹ</i> ਾ	Wing	Bill	Tail
G, r, intermedia	167, 170, 171	25.7, 26.5	70, 80
	(ін 166-176	from skull 31-32	75-85)
G, r, peninsularis	166		79)
	(ін ♂♀ 150-165	from skull 29-31	72-74)
G, r, indica	138-146, 156, av. 144-3	23-26·5 av. 25	62-74 av. 66⋅5
	(ін 139-155	from skull 29-32	55-72)
G. r. andamanensis	168 (2)-175 (2)	28.5, 28.6, 29.1, 30 (2)	71, 82-85
Central Nicobars	180	av. 29.2 30	87
G. r. halibrecta	171, 180, 182, 185	25.7, 20.5, 30, 30.4	86, 89 (2), 85
φ φ			
G. r. intermedia	160, 164, 165, 170	24.5, 25.5, 25.5	71, 77, 79, 81
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(ін 163-169	from skull 31-33	80-84)
G. r. peninsularis	155, 164, 166	26.8, 26.7 (2)	72, 73, 74
	(ін ♂♀ 158-165	from skull 29-31	72-74)
G. r. indica	- 136-149, av. 142	24-26.5 av, 24.8	60-66 av, 62
G, I, marca	(1н 140-149	from skull 29-31	60-70)
G. r. andamanensis	163, 169, 170	28.5, 29, 30.5	78, 80, 86
Central Nicobars	170, 172	28.4, 29.2	78, 80
G. r, halibrecta	175, 180	29	84,88

Sturnus vulgaris subspp.

	Wing	Bill	Tail
1 o? nominate vulgaris	137	27.2	64
	(Br. Handbook ♂ 9 122-132	from skull ♂ 25-27 (one 28)	♂ 64 - 68)
n n " ankiga" ?	130-136 av. 133-1	25·3-28.8 av. 27·1	61.65 av. 62.5
ਰੋਰ "sophiae" ?	127-135 av. 130·6	25.9-28.5 av. 27	59-65 av. 61.4
♀♀ "sophiae"	127-136 av. 131·3	24·5-27·6 av. 26.4	59-66 av. 63
♂♂ poltaratskyi	(IH ex HW 125-135	from skull 28-32	62-69)
♀ ♀ poltaratskyi	125-134 av. 129	23·5-28·7 av. 26·6	57-65 av. 61·3
	(IH ex HW 124-131	from skull 28-37	59-65)
ਰਰ nobilior	128, 135	28.5, 29.2	64 (2)
	(IH -	from skull 31-34	-)
♀ ♀ nobilior	125, 128, 135	28.5, 29	61,65
	(IH 127-134	from skull 31-34	-)
	127, 128	26.6, 27.7	63, 65
Q Q caucasicus	130-134 av. 132	26·2-30 av. 28	63-64
33 porphyronotus	(1Н 129-137	from skull 32-34	62-69)
Q Q porphyronotus	126, 128, 129	26.6, 28, 28.2	59, 62
	(IH 122-129	from skull 31-34	62-66)
♀ ♀ minor	111, 114	26, 26.1	55, 56
	(ін 110-120	26-27	-)
♂♀ indicus	113-121	25-27.5	50-55
	(ін 113-121	from skull 28-32	54-59)
	(IH 113-121	11 0 111 0 111	

(to be continued)